

Measurements of Ditrema furcatum and Ditrema atripes in 100ths of length to base of caudal fin.

	Ditrema furcatum.	Ditrema atripes.
	<i>Inches.</i>	<i>Inches.</i>
Extreme length.....	10.3	9.15
Length to base of caudal.....	8.18	7.35
Body:		
Height.....	.39	.38
Least height of tail.....	.12	.113
Length of caudal peduncle from end of anal fin.....	.167	.23
Head:		
Length.....	.263	.285
Width of interorbital area.....	0	.082
Length of snout.....	.07	.078
Length of gill-rakers.....	.01	.018
Length of maxillary.....	.075	.075
Length of mandible.....	.075	.092
Diameter of orbit.....	.075	.072
Dorsal:		
Length of base.....	.512	.48
Length of fifth spine.....	.085	.085
Length of highest spine.....	.09	.010
Length of highest ray.....	.12	.113
Anal:		
Length of base.....	.30	.275
Longest ray.....	.06	.058
Caudal:		
Middle rays.....	.09	.095
Upper lobe.....	.256	.23
Lower lobe.....	.24	.24
Pectorals, length.....	.25	.26
Ventrals, length.....	.155	.176
Dorsal.....	X, 25	X, 24
Anal.....	III, 33	III, 29
Tubes in lateral line.....	70	71
Rows of scales above lateral line.....	5	5
Rows of scales below lateral line.....	13	13

The present species was described from two specimens, similar in size, obtained in the San Francisco market, and probably caught in Monterey Bay. Later, about 200 others were obtained at Monterey and Santa Cruz, but the species has not yet been noticed elsewhere on the coast.

We refer this species for the present to the genus *Ditrema*, of which *Phanerodon* Girard is considered by us a synonym.

We have not seen the Japanese type of the genus, *Ditrema temmincki*, but in external characters at least it agrees with *Phanerodon*.

SAN FRANCISCO, CAL., March 14, 1880.

DESCRIPTION OF A NEW SCORPENOID FISH (SEBASTICHTHYS MALIGER), FROM THE COAST OF CALIFORNIA.

By **DAVID S. JORDAN** and **CHARLES H. GILBERT.**

Allied to *Sebastichthys nebulosus* and more remotely to *Sebastichthys vexillaris*. Body oblong, moderately robust, the profile with a regular but not very steep slope. Mouth moderate, nearly horizontal, the jaws equal when closed, the upper jaw somewhat emarginate. Maxillary reaching to near the posterior border of the eye; premaxillary in front below the level of the eye. Preorbital moderate, its neck about one-third the width of the large eye, with an angular lobe.

Spinous ridges on the top of the head rather prominent, much as in *nebulosus*, but lower, a little less depressed than in *rexillaris*. The following pairs are present: Nasal, preocular, supraocular, tympanic, and occipital, five in all. The nasal spines are very strong. The preocular and supraocular are broad and sharp. The tympanic spines are smaller than in related species. The occipital ridges are short and comparatively weak, the point rather depressed.

Preopercular spines very short, but all distinct, the upper one broad, the second longest and most acute. Opercular spines large, the upper very long and strong. Bluntish spines on subopercle and interopercle. Two suprascapular spines. Interorbital space rather deeply and somewhat evenly concave, with a rather deep pit anteriorly.

Gill-rakers about 10+20, stout, moderately long, rather longer than in *nebulosus*, somewhat clavate, the longest about equal to the diameter of the pupil.

Scales moderate, rough, in about 55 transverse rows. Accessory scales developed.

Dorsal spines very high and strong, the fourth spine highest, usually more than half the length of the head, the last spines low, so that the fin is deeply emarginated.

The membrane of the spinous dorsal is very deeply incised, more than half the anterior edge of each of the middle spines being above the membrane; even four-fifths of the length of the highest spine is sometimes free anteriorly. This is subject to some variations, but in all cases the bare portion of the spines is much higher than in other species. Soft dorsal high, but lower than spinous dorsal. Caudal truncate.

Anal fin rather low, the spines short. Second anal spine a little higher than the third, not two-thirds the height of the soft rays.

D. XIII, 12; A. III, 7.

Pectoral fins extremely broad and rounded, as in *S. rastrelliger*, the tips reaching beyond the tips of the ventrals, but not to the vent. The base of the fin is greater than the diameter of the eye and about twice the length of the occipital ridge. In both sexes the lower rays are thickened and fleshy.

Prevailing color a warm brownish yellow, sometimes quite yellow on the sides and below, the back sometimes considerably olive, sometimes reddish tinged. Sides of head, front of back, and thoracic region usually most distinctly yellow. The coloration mottled and clouded, but without distinct markings except the small spots with which the anterior region is closely covered. They are smallest and most distinct on the thoracic and scapular region. Here they are of a clear orange-brown color. On the top of the head they become more orange, and on the anterior part of the back they become larger and of a bright clear orange. Posteriorly they blend with the ground color. Top of head with dusky cross-shades. Sclerotic coat of eye spotted above with orange.

Fins all with the membranes slaty black; the pectorals and dorsal

paler at base and spotted with reddish. Membrane of the third dorsal spine scarcely paler than that of the second. There are no other traces of the light areas found in *nebulosus* and *fasciolaris*. There are usually traces of brownish shades radiating from the eye and alternating with yellowish areas.

This species is not rare in the San Francisco markets. The specimens from which the above description was taken, four in number, were obtained in the neighborhood of the Farallones. It is frequently taken in deep water in Monterey Bay and in the Straits of Fuca; it is very abundant, reaching a large size. It is one of the larger species, agreeing in size and appearance with *S. vexillaris*. Its relations are, however, more nearly with *S. nebulosus*, and it forms a transition from the brown to the red series.

Table of measurements.

Length to base of caudal	= 100
Body:	
Greatest height	37.5
Least height of tail	11.8
Head:	
Greatest length	38.5
Length of occipital ridges	6.3
Length of supraocular ridges	4.3
Length of preocular ridges	2.2
Interorbital width	7.9
Length of snout	9.2
Length of gill-rakers	3.5
Length of maxillary	19.5
Diameter of orbit	10.5
Dorsal:	
Longest spine	23
Longest ray	17.5
Least height of membrane between third and fourth spines	4.5
Anal:	
Second spine	12.3
Third spine	12
Longest ray	18
Caudal, length	17
Pectoral:	
Length	25
Width of base	11
Ventral, length	22
Dorsal	XIII, 12
Anal	III, 6
Lateral line (rows of scales)	47
Extreme length, in inches	15.45
Length to base of caudal, in inches	13.1

SAN FRANCISCO, CAL., March 15, 1880.